

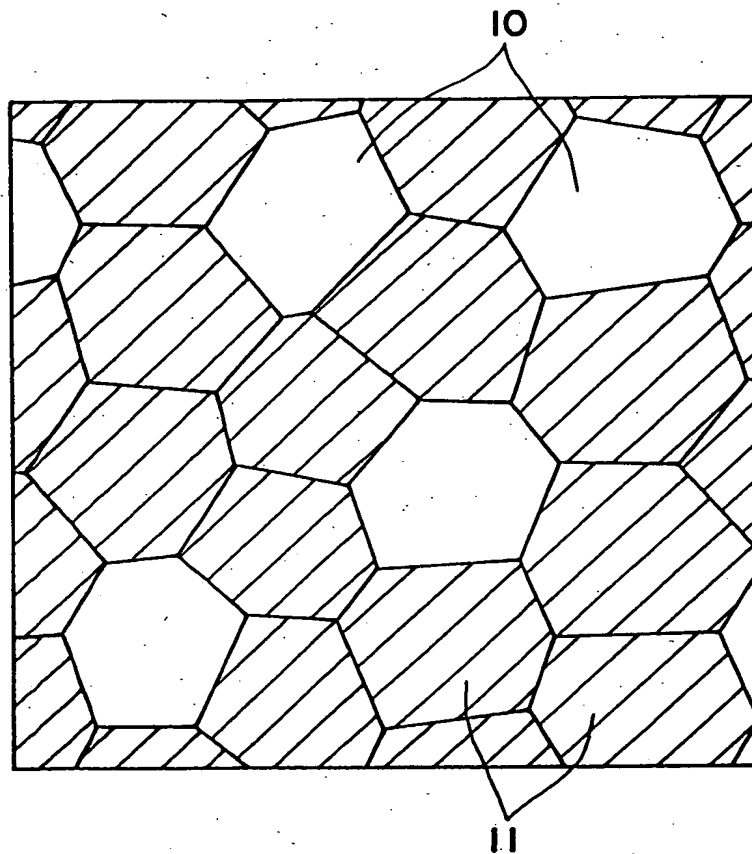
TABLE1

| Sample No. | W | ρ (Mg/m ³) | Br (T) | H _{ci} (kA/m) | (BH) _{max} (kJ/m ³) | Br/ ρ (x10 ⁻⁶ T·m ³ /g) | χ_{ir} (x10 ⁻⁴ H/m) | Irreversible Flux Loss (%) |
|--------------------|-----|--------------------------------|-----------|---------------------------|---|---|--|----------------------------------|
| 1 (Comp.Ex.) | 0.1 | 6.27 | 0.83 | 345 | 75.6 | 0.132 | 7.5 | -6.5 |
| 2 (This Invention) | 0.2 | 6.26 | 0.87 | 415 | 104.8 | 0.139 | 4.8 | -4.7 |
| 3 (This Invention) | 0.5 | 6.32 | 0.90 | 478 | 113.2 | 0.142 | 3.7 | -4.0 |
| 4 (This Invention) | 1.2 | 6.29 | 0.92 | 496 | 115.9 | 0.146 | 3.2 | -3.6 |
| 5 (This Invention) | 2.5 | 6.30 | 0.90 | 530 | 112.0 | 0.143 | 3.0 | -3.2 |
| 6 (This Invention) | 3.3 | 6.33 | 0.81 | 561 | 102.7 | 0.128 | 2.7 | -2.7 |
| 7 (Comp.Ex.) | 3.6 | 6.31 | 0.76 | 553 | 79.1 | 0.120 | 3.3 | -3.5 |

TABLE2

| Sample No. | Kneading Temp. (°C) | Molding Method | Molding Temp. (°C) | ρ (Mg/m ³) | Br (T) | H _{CJ} (kA/m) | (BH) _{max} (kJ/m ³) | Br/ ρ ($\times 10^{-6}$ T·m ³ /g) | χ_{ir} ($\times 10^{-7}$ H/m) | Irreversible Flux Loss (%) |
|---------------------|---------------------|--------------------|--------------------|-----------------------------|--------|------------------------|--|--|-------------------------------------|----------------------------|
| 8 (This Invention) | 200 | Injection Molding | 230 | 5.30 | 0.78 | 563 | 83.4 | 0.147 | 2.1 | -2.2 |
| 9 (This Invention) | 203 | Injection Molding | 245 | 5.50 | 0.80 | 551 | 88.3 | 0.146 | 2.3 | -2.5 |
| 10 (This Invention) | 211 | Injection Molding | 260 | 5.67 | 0.82 | 542 | 92.6 | 0.145 | 2.5 | -2.9 |
| 11 (This Invention) | 216 | Injection Molding | 275 | 5.80 | 0.84 | 535 | 96.2 | 0.144 | 2.7 | -3.1 |
| 12 (This Invention) | 220 | Compaction Molding | 210 | 5.95 | 0.85 | 531 | 100.5 | 0.143 | 2.9 | -3.4 |
| 13 (This Invention) | 224 | Compaction Molding | 215 | 6.21 | 0.88 | 517 | 108.8 | 0.142 | 3.2 | -3.7 |
| 14 (This Invention) | 230 | Compaction Molding | 220 | 6.48 | 0.92 | 510 | 118.4 | 0.142 | 3.8 | -4.2 |

Fig. 1



F i g . 2

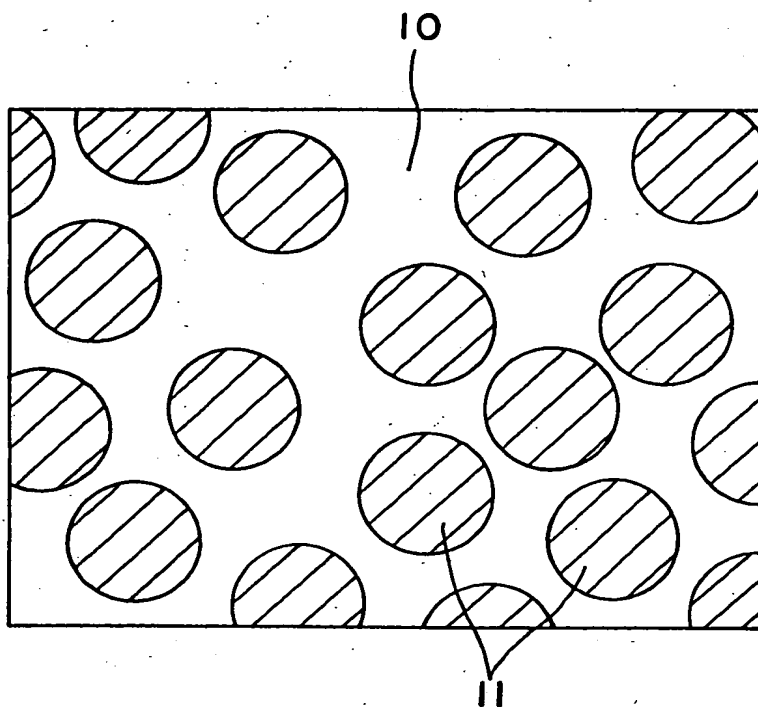


FIG. 2

F i g . 3

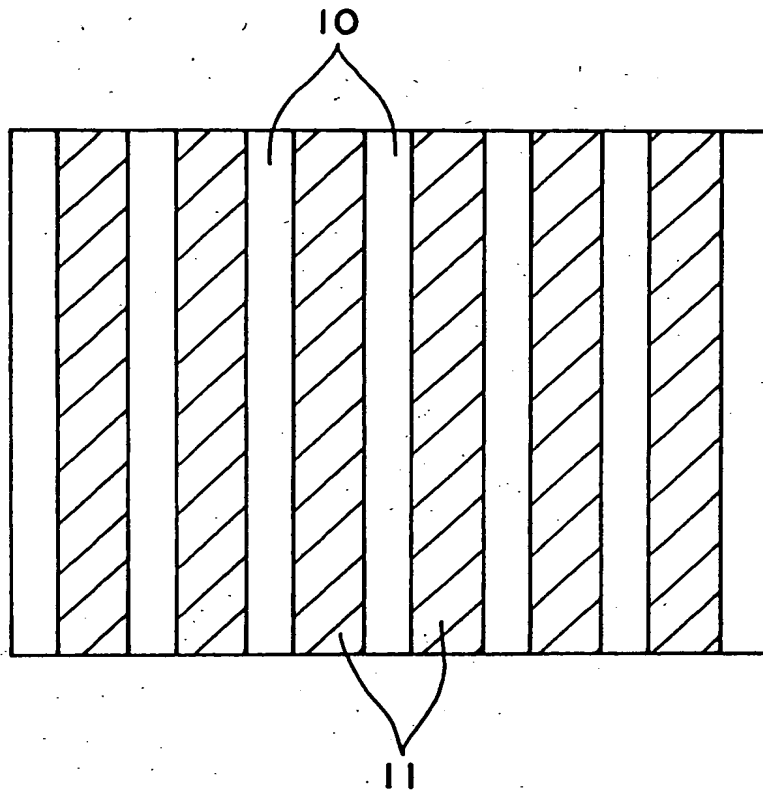


FIG. 3

F i g . 4

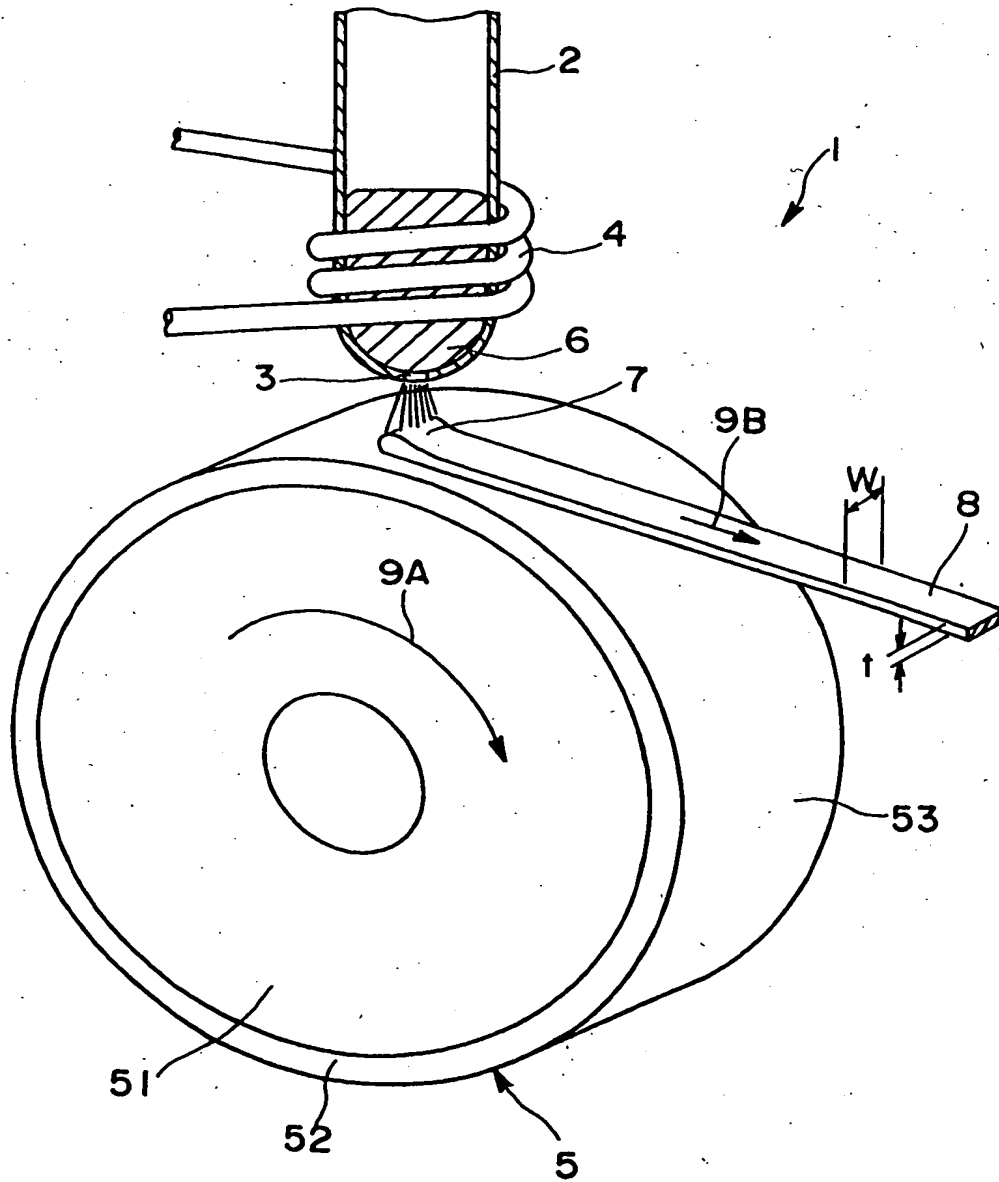


FIG. 4

F i g . 5

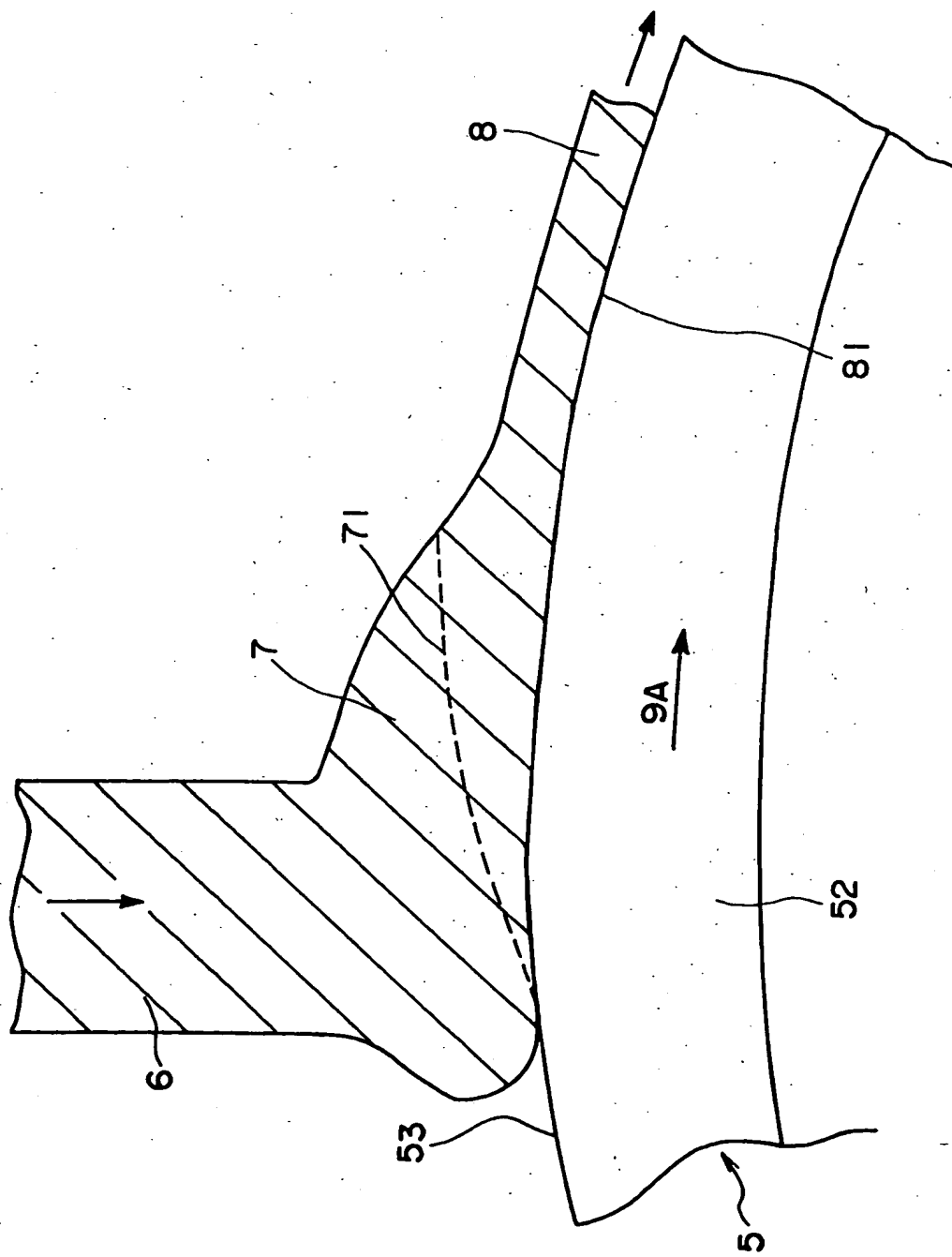


Fig. 6

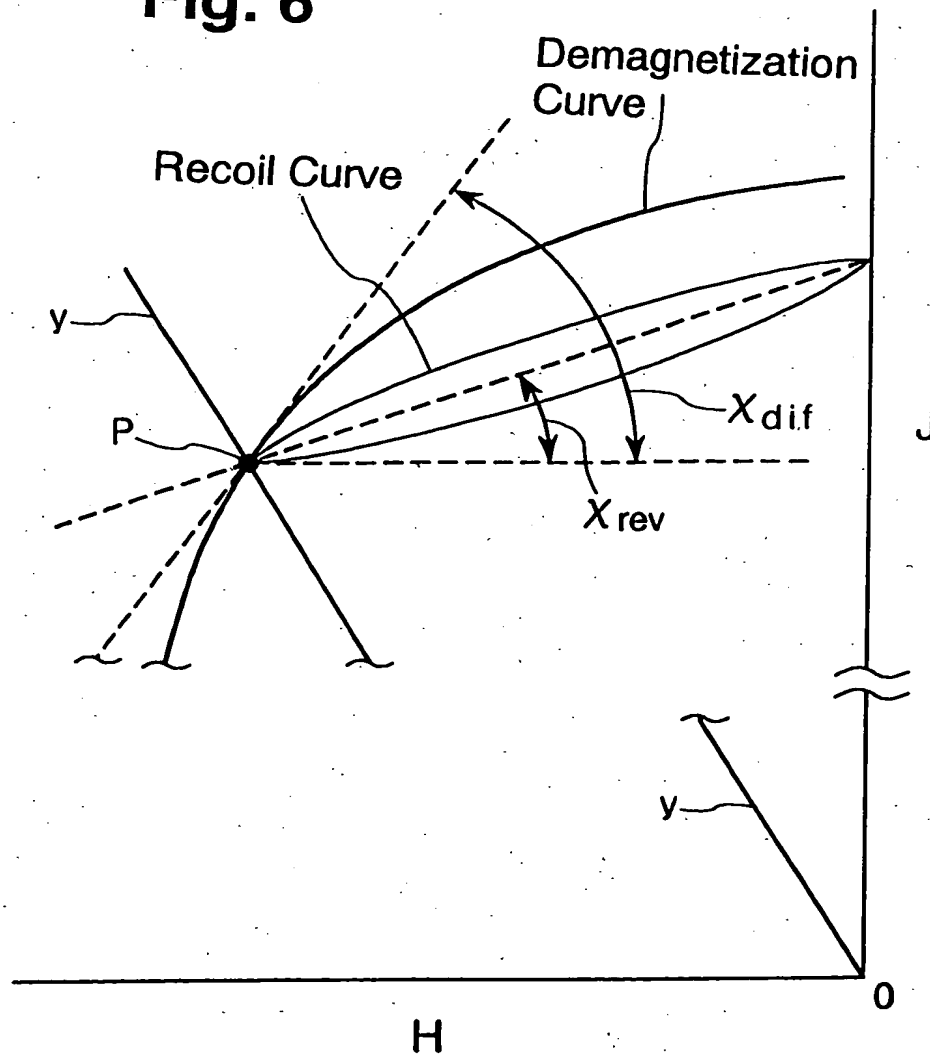
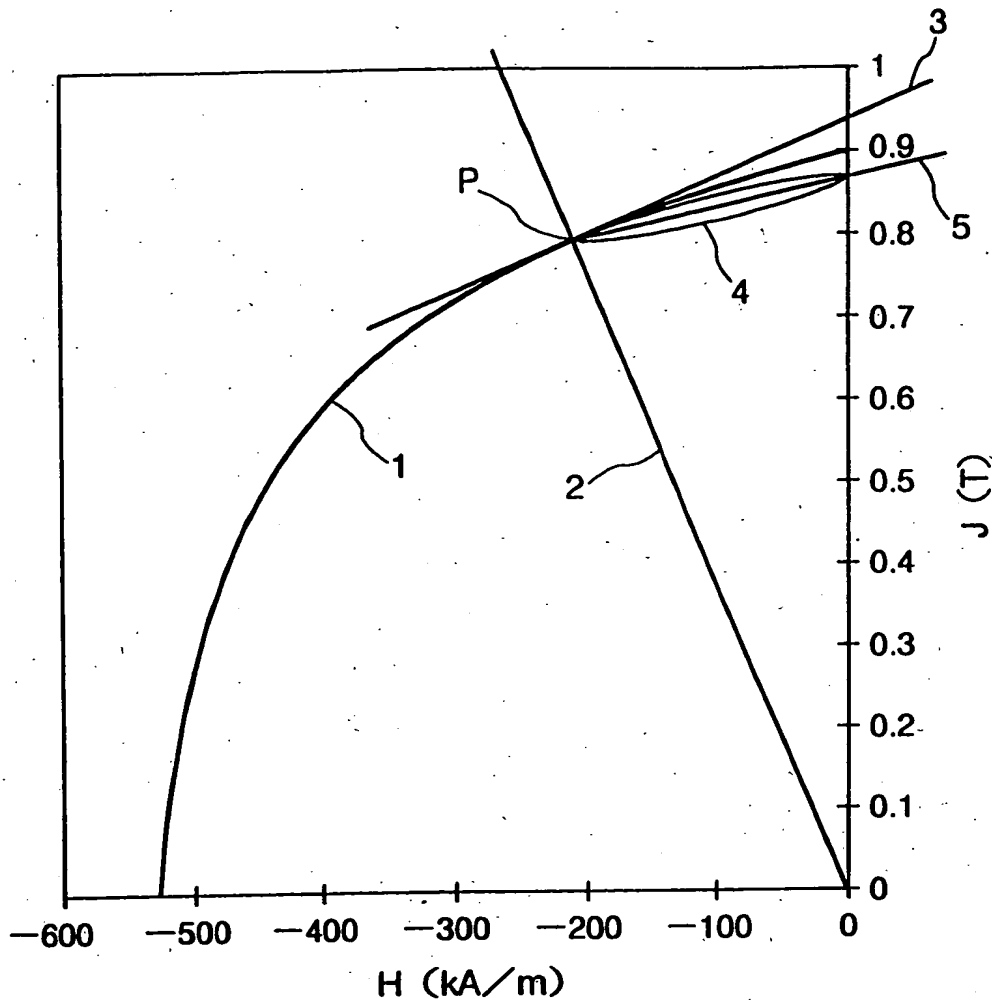


Fig. 7



No.1: Demagnetization Curve

No.2: Straight Line

Having a Gradient of $-3.8 \times 10^{-6} \text{H/m}$ in the J-H diagram

No.3: Tangential Line at Intersection Point P

No.4: Recoil Curve

No.5: Straight Line

Representing a Gradient of the Recoil Curve